



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,259	10/24/2003	Patrick Haluptzok	13768.783.120	9080

47973 7590 10/16/2007
WORKMAN NYDEGGER/MICROSOFT
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UT 84111

EXAMINER

RAHMJOO, MANUCHER

ART UNIT	PAPER NUMBER
----------	--------------

2624

MAIL DATE	DELIVERY MODE
-----------	---------------

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/693,259	Applicant(s) HALUPTZOK ET AL.	
	Examiner Mike Rahmjoo	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-15, 23-25 and 27-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15, 23-25, 27-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11, 12- 15, 17- 25, 27-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1 line 8, applicant recites "a trainer...". It is unclear if said trainer and "trainer" in line 5 are the same trainers or different.

Claim 23 recites the limitation "by the recognizer" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-11, 12- 15 and 17- 25, 27- 34 are indefinite because they depend on indefinite antecedent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2624

Claims 1- 29,32,34 are rejected under 35 U.S.C. 102(b) as being anticipated by Berman et al (US Patent 5710832), hereinafter, Berman.

As per claims 1 and 23 Berman clearly teaches an ink service engine for receiving ink and storing collected ink corresponding to for example fig. 7 and column 7 lines 1- 35 wherein Windows 701 contains a recognition context (RC) manager 702 that support handwriting data entry and recognition, the RC manager 702 includes a recognizer 703, which *receives raw handwritten data (corresponding to receiving ink or characters and inherently storing for conversion)* and converts the data to recognized symbols;

a harvesting service engine for collecting text corresponding to for example fig. 7 and column 7 lines 1- 35 wherein recognizer hook 708 (corresponding to a harvesting service engine) which traps (corresponding to collection) all output from recognizer;

a trained data engine for storing trained data from trainer clients corresponding to for example fig. 7 and column 7 lines 1- 35 wherein recognition context (RC) manager 702 supports handwriting data entry and recognition;

a component (fig. 7 blocks 704 or 705 wherein writing inherently is made through said blocks) having interfaces for personalizing a handwriting recognizer with data authored by a user corresponding to for example fig. 7 and column 7 lines 1- 35 wherein a user writes data (corresponding to data authored by a user) onto the *input tablet* that is intended as input for the application 709 ;

and a trainer coupled to the component for training the handwriting recognizer with the data authored by the user and the collected ink corresponding to for example fig. 7 and the trainer block 710.

Berman also teaches an in tandem process of collection, storing of data (storing the handwritten data or ink as they are written in box 103). Column 4 recites training handwritten data or ink(training handwritten data and doing the same for misrecognized symbols). Said column also recites a process of selection of the misrecognized symbols 109 by the user. The user selects the misrecognized symbols 109 by tapping (pen down and pen up) the pen on the corresponding character boxes. The misrecognized symbols 109 are highlighted. The user can select multiple character boxes by dragging the pen across the boxes. The character boxes automatically scroll during the dragging process when the pen is dragged across the right-most or left-most visible symbol. When the misrecognized symbols are selected, the trainer displays in the ink train box 110 the handwritten data that corresponds to the selected symbols 109.

As per claim 2 and in light of rejection of claim 1, Berman teaches an application (for example a program) coupled to the component for receiving the data authored by a user corresponding to for example the abstract, fig. 7, and column 6 line 65 for application 709.

As per claim 3 and in light of rejection of claim 1, Berman teaches an interface for retrieving ink from an ink database corresponding to for example fig. 7 and column 7 lines 1- 35 wherein a user writes data (corresponding to data authored by a user) onto

Art Unit: 2624

the *input tablet* that is intended as input for the application 709 and input grid driver 707 which receives that data and sends (corresponding to *set and get* as disclosed by applicant) it to 702. Also see fig. 1 box 106- 108.

As per claim 4 and in light of rejection of claim 1, Berman teaches an interface for storing the collected ink in ink database corresponding to for example fig. 7 and fig. 1 box 106 for storing handwritten data 103.

As per claim 5 and in light of rejection of claim 1, Berman teaches an interface for retrieving text from a harvesting service database corresponding to for example fig. 7 and fig 1 box 107 which stores symbols for the handwritten data and for box 108 for scrolling data.

As per claim 6 and in light of rejection of claim 1, Berman teaches an interface for storing text in a harvesting service database and input scope (inherent to any documents which are created and stored e.g., fig. 10 block 1013 and saving the new prototype) corresponding to for example fig. 7 and fig. 1 and character box 107 or fig. 2b box 202.

As per claim 7 and in light of rejection of claim 1, Berman teaches an interface for enumerating ink stored in an ink database corresponding to for example fig. 1 box 107 and fig. 2b box 202 their and corresponding application.

As per claim 8 and in light of rejection of claim 1, Berman teaches an interface for enumerating text stored in a harvesting ink database corresponding to for example fig. 7 and fig. 1 box 107 and fig. 2b box 202.

As per claim 9 and in light of rejection of claim 1, Berman teaches an interface for loading trained data from a trained data database corresponding to for example column 4 line 57 and fig. 7 and fig. 1 box 111 used for inputting data to train the recognizer.

As per claim 10 and in light of rejection of claim 1, Berman teaches an interface for requesting training of the handwritten recognizer corresponding to for example fig. 7 and fig. 1 box 110 (as a train box) and box 114 in column 5 lines 1- 5 (as a trainer which sends a message to window 100 asking for replacement (corresponding to request) with a correct symbol).

As per claim 11 and in light of rejection of claim 1, Berman teaches an interface for sending data to the component corresponding to for example fig. 7 and fig. 1 box 110- 111.

As per claim 13 and in light of rejection of claim 1, Berman teaches the data authored by the user comprises text corresponding to for example fig. 7 and fig. 1 box 113 (and also 110 and 105 as text box) and box 110 containing user's handwriting "k" which appears in box 105.

As per claim 14 and in light of rejection of claim 1, Berman teaches the ink engine stores ink in the database corresponding to for example fig. 7 the RC manager 702 which sends the raw handwritten data to recognizer 703 and the recognizer 703 returns the recognized symbols formatted as a symbol graph to RC manager 702. Also see column 6 line 65 for the application 709 (an engine) which performs the handwriting recognition and the abstract which for the trainer program (an engine) which store and outputs from a recognizer.

As per claim 15 and in light of rejection of claim 1, Berman teaches the component comprises an interface for the harvesting service engine corresponding to for example fig.7 the RC manager 702 which sends the raw handwritten data to recognizer 703 and the recognizer 703 which returns the recognized symbols formatted as a symbol graph to RC manager 702 and column 5 lines 1- 5 wherein trainer sends a message to window 100 asking for replacement (corresponding to harvesting) with a correct symbol.

As per claim 17 and in light of rejection of claim 1, Berman teaches the trainer comprises a shape trainer corresponding to for example fig.7 and the symbols formatted as symbol graph to RC manager 702 and fig. 1 box 113 which contains text symbols and gesture both as shape trainers.

As per claim 18 and in light of rejection of claim 1, Berman teaches the trainer comprises a text trainer corresponding to for example fig. 1 box 113 which contains text symbols.

As per claim 19 and in light of rejection of claim 1, Berman teaches the application comprises a personalization wizard corresponding to for example fig. 7 and column 6 line 65 for application 709.

As per claim 20 and in light of rejection of claim 1, Berman teaches the application comprises an ink viewer corresponding to for example fig. 7 and fig. 1 boxes 105 and 110.

As per claim 21 and in light of rejection of claim 1, Berman teaches the application comprises a text viewer corresponding to for example fig.7 and fig. 1 and box 111.

As per claims 22 and 34 Berman teaches a computer-readable medium having computer-executable components comprising the system of claim 1 corresponding to for example system 100 of fig. 1 and 7 containing a word processor.

As per claim 24 Berman teaches recognizing handwriting using the trained data corresponding to for example column 5 line 45.

As per claim 25 Berman teaches collecting ink and translation text (corresponding to misrecognized symbol 109) corresponding to for example column 4 line 29.

As per claim 28 Berman broadly teaches storing an email address (corresponding to text and symbol) corresponding to for example fig. 1d box 113.

As per claim 29 Berman broadly teaches storing a URL corresponding to for example fig. 1d box 113.

As per claim 32 Berman teaches updating a language model of the handwriting recognizer during recognition corresponding to for example selection of the misrecognized symbols and making correction (updating) through box 112.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2624

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30-31,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berman in view of Loudon et al (US PAP 203/ 0190074), hereinafter, Loudon.

As per claim 30 Berman does not explicitly teach a trainer for each trainable handwriting.

However, Loudon teaches invoking a trainer (corresponding to trainers 56,58, 60) for each trainable handwriting recognizer supporting the language (corresponding to character or geometry) of the collected data to perform training using the stored data corresponding to for example fig. 3. and also [0050] and fig. 5 block 200.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Loudon into Berman to provide different trainers and enable storing a first model in a computer readable storage medium for a first portion of the character to be recognized, and storing a second model in the computer readable storage medium for a second portion of the character and therefore improve accuracy and efficiency of the system see for example [0011-0012].

As per claim 31 Berman teaches loading the trainer (inputting data) corresponding to for example column 4 line 57 and fig. 1 box 111 used for inputting data to train the recognizer.

Art Unit: 2624

As per claim 33 and in light of the rejections made, Loudon teaches training multiple handwriting recognizers using the stored data corresponding to for example fig. 16 and [0041] for the three different types of recognizers.

Response to Arguments

Applicant's arguments filed 9/28/2007 have been fully considered but they are not persuasive.

In response to applicant's remarks on page 12 wherein applicant requests material regarding "implicit or explicit official notice", examiner fails to see such rejections made of the record in the prior non- final rejection.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Inquiry

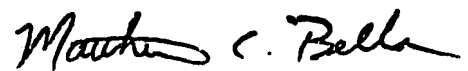
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is 571-272-7789. The examiner can normally be reached on 8 AM- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Rahmjoo

October 7, 2007



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600